

WHAT IS CLAIMED IS:

1. A method for manufacturing a semiconductor component, comprising:
providing a semiconductor substrate having a major surface;
forming first and second surface features over the major surface;
forming a first polysilicon layer over the first and second surface features; and
redistributing the first polysilicon layer in at least the region between the first and second surface features.
2. The method of claim 1, wherein redistributing the first polysilicon layer comprises annealing the first polysilicon layer.
3. The method of claim 2, wherein annealing the first polysilicon layer comprises annealing the first polysilicon in an ambient comprising hydrogen.
4. The method of claim 3, wherein annealing the first polysilicon layer includes heating the first polysilicon layer to a temperature ranging between approximately 750 degrees Celsius and approximately 1,100 degrees Celsius.
5. The method of claim 2, further including forming a second polysilicon layer over the first polysilicon layer.
6. The method of claim 5, further including redistributing the second polysilicon layer.
7. The method of claim 6, wherein redistributing the second polysilicon layer includes annealing the second polysilicon layer in a hydrogen ambient.
8. The method of claim 7, wherein annealing the second polysilicon layer includes heating the second polysilicon layer to a temperature of at least 750 degrees Celsius.
9. A method for manufacturing a semiconductor component, comprising:
providing a semiconductor substrate having a major surface;

forming a first dielectric material on the major surface;
forming first and second conductors over first and second portions of the first dielectric material, the first and second conductors having a gap therebetween;
forming a second dielectric material over the first and second conductors;
forming a first layer of polysilicon over the first and second conductors; and
repositioning atoms of the first layer of polysilicon.

10. The method of claim 9, wherein forming the first and second conductors comprises:

forming a second layer of polysilicon over the first dielectric material; and
patterning the second layer of polysilicon over the first dielectric material to form the first and second conductors.

11. The method of claim 9, wherein forming the first layer of polysilicon over the first and second conductors comprises forming a third dielectric material on the first and second conductors and forming the first layer of polysilicon on the third dielectric material.

12. The method of claim 11, wherein repositioning atoms of the first layer of polysilicon comprises annealing the first layer of polysilicon.

13. The method of claim 11, wherein repositioning atoms of the first layer of polysilicon comprises heating the first layer of polysilicon to a temperature of at least 750 degrees Celsius.

14. The method of claim 11, further including forming a second layer of polysilicon over the first layer of polysilicon.

15. The method of claim 14, further including annealing the second layer of polysilicon.

16. The method of claim 11, wherein forming the first layer of polysilicon includes forming the first layer of polysilicon to have a thickness ranging between a monolayer of polysilicon and about 300 Angstroms.

17. The method of claim 9, wherein repositioning atoms of the first layer of polysilicon includes repositioning the atoms in an ambient comprising hydrogen.
18. A semiconductor component, comprising:
a semiconductor substrate having a major surface;
a dielectric material disposed on the major surface;
first and second conductors disposed on first and second portions of the dielectric material, respectively;
a second dielectric material disposed on the first and second conductors; and
a void-free layer of polysilicon having a polysilicon surface disposed on the second layer of dielectric material, the polysilicon surface having a surface roughness of less than about 50 Angstroms.
19. The semiconductor component of claim 18, wherein the void-free layer of polysilicon has a thickness of less than about 300 Angstroms.
20. The semiconductor component of claim 18, further including another void-free layer of polysilicon disposed over the void-free layer of polysilicon, wherein the another layer of void-free polysilicon has a surface roughness of less than about 50 Angstroms.